WHAT IS CLAIMED IS:

- 1. An electrophoretic display fluid comprising charged pigment particles dispersed in a mixture comprising a perfluoropolyether and a hydrofluoropolyether.
- 2. The display fluid of Claim 1 wherein said perfluoropolyether is a homopolymer of trifluoro(trifluoromethyl)oxirane.
- 3. The display fluid of Claim 1 wherein said perfluoropolyether is selected from Dupont K series or Solvay Solexis HT series.
- 4. The display fluid of Claim 3 wherein said perfluoropolyether is selected from Solvay Solexis HT170, HT200, HT230 and Dupont K6 and K7.
- 5. The display fluid of Claim 1 wherein said hydrofluoropolyether is selected from Solvay Solexis ZT series.
- 6. The display fluid of Claim 5 wherein said hydrofluoropolyether is Solvay Solexis ZT180.
- 7. The display fluid of Claim 1 wherein said mixture has a weight ratio of hydrofluoropolyethers to perfluoropolyethers from about 2/98 to about 98/2.
- 8. The display fluid of Claim 7 wherein said ratio is from about 5/95 to about 50/50.
- 9. The display fluid of Claim 8 wherein said ratio is from about 8/92 to about 30/70.
- 10. The display fluid of Claim 1 wherein said pigment particles are primary pigment particles or pigment-containing microcapsules or microparticles.
- 11. The display fluid of Claim 10 wherein said pigment is TiO₂, ZnO, or BaSO₄.
- 12. The display fluid of Claim 1 wherein said solvent mixture comprises a mixture of a Si phthalocyanine or naphthalocyanine dye and a Cu phthalocyanine or naphthalocyanine dye dissolved therein.

13. The display fluid of Claim 12 wherein said Si phthalocyanine dye is:

or

wherein:

each n is individually 0-4 for silicon phthalocyanine (I) or 0-6 for silicon naphthalocyanine (II);

R¹ is independently R_f—A— (wherein R_f is as defined below and A is a single bond, —CH₂O—, —CH₂CH₂O— or —CO—), alkyl, heteroalkyl, aryl, heteroaryl, heteroalkyl aryl-heteroalkyl, R'O—, R'S—, R'R"N—, R'CO—, R'OCO—, R'COO—, R'CONR"—, R'R"NCO—, R'NHCONR"—, R'SO₂NR"— or R'R"NSO₂— (in which R' and R" are independently hydrogen, R_f (as defined below), alkyl, heteroalkyl, aryl, heteroaryl, heteroarylalkyl, aryl-heteroalkyl,

heteroalkyaryl or alkyl-heteroaryl) or halogenated, particularly fluorinated derivatives thereof;

Z is O or NR' wherein R' is defined as above;

 R^2 is hydrogen, R_f —B— (wherein R_f is as defined below and B is a single bond, — CH_2 — or — CH_2CH_2 —), alkyl, heteroalkyl or halogenated, particularly fluorinated derivatives thereof, or — $SiR^3R^4R^5$ wherein R^3 , R^4 , and R^5 are independently an alkyl or fluoroalkyl group of 1 to 20 carbon atoms or alkoxy or fluoroalkoxy of 2 to 40 carbon atoms; and

R_f is a low molecular weight (100-100,000) fluorinated polymeric or oligomeric moiety prepared from one or more types of fluorinated monomers.

14. The display fluid of Claim 13 wherein said Si phthalocyanine dye is:

15. The display fluid of Claim 13 wherein said Si phthalocyanine dye is:

16. The display fluid of Claim 13 wherein said Si phthalocyanine dye is:

17. The display fluid of Claim 13 wherein said Si phthalocyanine dye is:

18. The display fluid of Claim 13 wherein said Si phthalocyanine dye is:

18. The display fluid of Claim 10 where
$$S_{17}^{-1}$$
 S_{17}^{-1} $S_$

19. The display fluid of Claim 12 wherein said Si phthalocyanine dye is:

wherein R is H or $C_m H_n F_p$ in which m is 1-18 and $n+p \le 2m+1$.

20. The display fluid of Claim 12 wherein said Cu phthalocyanine dye is:

$$(R_f)_a \qquad (R_f)_b \qquad \qquad CuPc-R_f \qquad \qquad (a,b,c,d=0-4,\ a+b+c+d\ge 3)$$

21. The display fluid of Claim 20 wherein said Cu phthalocyanine dye is:

- 22. The display fluid of Claim 12 wherein the weight ratio of the Si dye to the Cu dye is from about 1/10 to about 10/1.
- 23. The display fluid of Claim 22 wherein said weight ratio of the Si dye to the Cu dye is from about 1/4 to about 4/1.
- 24. The display fluid of Claim 23 wherein said weight ratio of the Si dye to the Cu dye is from about 1/2 to about 2/1.
- 25. An electrophoretic display comprising display cells filled with an electrophoretic display fluid comprising charged pigment particles dispersed in a mixture comprising a perfluoropolyethers and a hydrofluoropolyether.
- 26. The display fluid of Claim 25 wherein said perfluoropolyether is a homopolymer of [trifluoro(trifluoromethyl)oxirane].
- 27. The display fluid of Claim 25 wherein said perfluoropolyether is selected from Dupont K series or Solvay Solexis HT series.
- 28. The display fluid of Claim 27 wherein said perfluoropolyether is selected from Solvay Solexis HT170, HT200, HT230 and Dupont K6 and K7.
- 29. The display fluid of Claim 25 wherein said hydrofluoropolyether is selected from Solvay Solexis ZT series.

- 30. The display fluid of Claim 29 wherein said hydrofluoropolyether is Solvay Solexis ZT180.
- 31. The display of Claim 25 wherein said solvent mixture comprises a mixture of a Si phthalocyanine or naphthalocyanine dye and a Cu phthalocyanine or naphthalocyanine dye dissolved therein.
- 32. The display fluid of Claim 31 wherein the weight ratio of the Si dye to the Cu dye is from about 1/10 to about 10/1.
- 33. The display fluid of Claim 32 wherein said weight ratio of the Si dye to the Cu dye is from about 1/4 to about 4/1.
- 34. The display fluid of Claim 33 wherein said weight ratio of the Si dye to the Cu dye is from about 1/2 to about 2/1.
- 35. The display of Claim 25 which is a conventional partition type display, the display prepared by the microencapsulation process or the display prepared by the microcup technology.